# The Geronimo Flow

August 2014



#### **Your Newsletter**

The Geronimo and Alligator Creeks Watershed Partnership was formed in 2010 to restore and protect water quality in the Geronimo and Alligator Creeks Watershed due to elevated levels of bacteria and nitrate-nitrogen. The Partnership completed a Watershed Protection Plan in 2012 and is now working toward full

implementation. The purpose of this newsletter is to inform and engage local stakeholders in helping to improve and protect the quality of water in Geronimo and Alligator Creeks. For more information about the project visit our website: www.geronimocreek.org

# Rainwater Harvesting Captures a Great Audience

With signs of the impact of the ongoing drought all around us, interest in conserving and protecting our valuable water resources is at an all-time high. The Partnership recently conducted a Rainwater Harvesting Class for Homeowners to a packed room on August 12 at the GBRA River Annex. Rainwater harvesting captures, diverts, and stores rainwater for later use.

Implementing rainwater harvesting (RWH) is beneficial because it reduces demand on existing water supplies and reduces run-off, erosion, and contamination of surface water.

Rainwater can be used for nearly any purpose that requires water. These include landscape use, stormwater control, wildlife and livestock watering, in-home use, and fire protection. A rainwater harvesting system can range in size and complexity. All systems have basic components which include: a catchment surface, conveyance system, storage, distribution, and treatment.

The catchment area is the first point of contact for rainfall. For the vast majority of tank-based rainwater harvesting systems, the catchment area is a roof surface. Important factors to consider in planning a RWH system are: roof material, slope, and sizing of the catchment area.

Roof material is not as important as contaminants that may be on the

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The winners of the rain barrel raffle at the August 12 Rainwater Harvesting class were all smiles.



Rainwater harvesting can be utilized to provide additional water to livestock and wildlife.

roof. For landscape purposes, the common asphalt shingle will work fine. If starting on a new system, the recommendation is for a metal roof because they easily shed contaminants.

The slope of the roof affects how quickly water will runoff during a rain event. A steep roof will shed runoff quickly and more easily clean the roof of contamination.

The size of the catchment area or roof will determine how much rainwater you can harvest. The area is based on the "footprint" of the roof, which can be calculated by finding the area of the building and adding the roof's overhang.

Approximately 550 gallons can be collected for every 1,000 square feet of collection surface per inch of rainfall.

In this part of the state, based on the average rainfall, a RWH system with just 1,000 square feet of catchment area could collect just over 18,500 gallons each year!

Come out the next Partnership meeting September 9 at 6 pm at the GBRA River Annex to hear about how you can start rainwater harvesting. We will have Dave Elders of the Guadalupe County Master Gardeners conducting a one hour class on RWH, so come out and learn how you can get started.

#### To All the Farmers and Ranchers

Joseph McIntosh is a District Technician for the Comal-Guadalupe Soil and Water Conservation District (SWCD). The SWCD was awarded a grant from the Texas State Soil and Water Conservation Board to hire a technician who can assist farmers and ranchers in developing Water Quality Management Plans (WQMP) for their individual operations. The grant also provides financial incentives to help producers implement approved practices.

Nutrient and bacteria loading from agricultural operations are identified in the Geronimo and Alligator Creeks WPP as potential sources of pollution in area creeks. A site specific WQMP is developed by working with a land owner to identify, design, and implement practices that will protect water resources. The plan includes appropriate land treatment practices, production practices, management

measures and technologies. Examples of key practices include prescribed grazing, fencing, watering facilities, pipelines, wells, grassed waterways, pasture/hayland/rangeland planting, riparian buffers, filter strips, and others.

"There is no cost to the landowner for development of the WQMP," says McIntosh. However, there may be costs for implementing certain practices, but financial assistance is available in most cases.

September starts our fiscal year 2015 off and with that being said, a new average cost list for the approved best management practices will be approved and used. Landowners within the watershed should keep an eye out for the updated information at the upcoming Geronimo and Alligator Creeks Partnership Meeting September 9.

If you need assistance or are interested in learning more, you can contact Mr. McIntosh at (830) 379-0930 x107, or stop by the office at 3251 N. Hwy 123 Bypass in Seguin.

Come to the Partnership meeting September 9<sup>th</sup> and meet Joseph. He will be on hand at the meeting and will be happy to visit with you and answer any questions you may have.

# **Feral Hog Workshop**

The first Feral Hog Workshop to ever be offered in the watershed was held Friday, May 23, 2014 from 8:30 a.m. – 3:00 p.m. at the Texas Agricultural Education and Heritage Center to an audience of over 50 attendees.

Speakers included representatives of AgriLife Extension, Texas Animal Health Commission, Texas Parks and Wildlife Department, Texas Wildlife Services and the Texas Department of Agriculture. Topics included basic ecology and biology, feral hog effects on the Geronimo Creek watershed, regulations for transporting, disease concerns, population dynamics and control techniques, including traps, as well as hunting regulations. There was also a discussion of feral hog resources available to the landowner.

"Each year feral hogs do millions of dollars of damage to property, crops and watersheds, as well as serving as potential vectors for disease," said Jeff Hanselka, AgriLife Extension agent for agriculture and natural resources, Guadalupe County. "This program gave participants some useful information about feral hogs, especially their behavior and ways to control them."

Five Texas Department of Agriculture continuing education units — two general, two integrated pest management, and one in laws and regulations — for commercial, non-commercial and private applicators were given to each attendee.

Our goal is to make this workshop an annual event, in order to better equip landowners with the knowledge they need to help control feral hogs on their property.

# Lone Star Healthy Streams Workshop

A Lone Star Healthy Streams workshop was conducted June 5 at the Texas Agricultural Education and Heritage Center to an audience of 33 attendees. A catered lunch was provided.

"The Lone Star Healthy Streams program aims to educate Texas livestock producers and land managers on how to best protect Texas waterways from bacterial contributions associated with livestock production and feral hogs," said Jennifer Peterson, Texas A&M

AgriLife Extension Service program specialist in College Station.

The workshop was sponsored by the Texas Agricultural Education and Heritage Center and the Texas State Soil and Water Conservation Board and is free to all participants. Three Texas Department of Agriculture general continuing education credits were provided for certified pesticide applicators.

Currently, about 300 Texas water bodies do not comply with state water quality standards established Do you have something you would like to contribute to the newsletter? Or, would you like to see us provide information on a particular topic? Suggestions can be sent to Ward Ling at <a href="mailto:wling@ag.tamu.edu">wling@ag.tamu.edu</a> or call 979-845-6980.

for *E. coli* bacteria. By participating in this workshop, livestock producers and landowners learned about specific conservation practices that help improve and protect the quality of Texas' water bodies.

Workshop presentations focused on specific best management

practices to help minimize bacterial contamination originating from beef cattle, horses and feral hogs.

The Lone Star Healthy Streams program is funded through a Clean Water Act nonpoint source grant from the Texas State Soil and Water Conservation Board and the U.S. Environmental Protection Agency.

# **Protect Your Groundwater Day September 9**

Extended drought in California and Texas have put the spotlight on a critical resource of importance to every person—groundwater. The Geronimo and Alligator Creeks Watershed Partnership is urging the public to pitch in on Protect Your Groundwater Day September 9.

Groundwater makes up 99 percent of all available fresh water in the world and is connected from beneath to most surface water bodies.

Groundwater is out of sight and out of mind for most people. Yet groundwater is the source water supply for 13 million households on private water wells in America. It also supplies much of the water to our country's more than 40,000 community water systems. Not only that, it supplies 53.5 billion gallons of water a day for agriculture and supports the environment.

Started by the National Ground Water Association, Protect Your Groundwater Day is the perfect time for every household to act to protect this resource. The Protect Your Groundwater web page, <a href="https://www.NGWA.org/PYGWD">www.NGWA.org/PYGWD</a>, provides ways citizens can protect groundwater from overuse or contamination. Here are a few suggestions:

#### **Everyone**

When it comes to hazardous household substances:

- Store them properly in a secure place
- Use them according to the manufacturer's recommendations
- Dispose of them safely (if in doubt as to how, contact your local waste authority)

When it comes to water conservation:

- Modify your water use (click to see more water-saving tips)
- <u>Install a water-saving</u>
   <u>device</u> (i.e. a water-efficient
   appliance or faucet and
   showerhead flow restrictors)

#### If you own a water well

- Move possible contamination sources a safe distance from the wellhead
- Know what's in your water:
   <u>Test your water</u> regularly for
   bacteria, nitrate, and anything
   of local concern
- <u>Get your annual water well</u> system inspection
- Properly <u>decommission any</u> <u>abandoned wells</u> using a qualified professional

To learn more about groundwater protection in Texas, visit

# **Upcoming Events**

#### **Partnership Meeting**

Tuesday September 9 6p – 7:30p GBRA River Annex 905 Nolan Street Seguin

Homeowner Septic System
Maintenance Class
Monday, November 10
6:00 – 8:00p
GBRA River Annex
905 Nolan Street
Seguin

Homeowner Septic System
Maintenance Class
Emphasis on Aerobic
Systems
Tuesday, November 11
8:30a – 3:30p
NBU Service Center
355 FM 306
New Braunfels

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Board

#### http://twon.tamu.edu/

and access publications on groundwater protection, using water wisely, and decommissioning abandoned wells.

NGWA, a nonprofit organization composed of U.S. and international

groundwater professionals. It is dedicated to advancing groundwater knowledge. NGWA's vision is to be the leading groundwater association that advocates the responsible development, management, and use of water.

## **Homeowner Septic System Maintenance Classes**

A 2-hour Homeowner Septic System Workshop is scheduled for November 10<sup>th</sup> from 6-8 p.m. at the GBRA River Annex, 905 Nolan Street, Seguin.

The course will provide a basic overview of the operational and maintenance activities of conventional and aerobic septic systems. Topics covered will include treatment processes, health and safety considerations, an overview of how to inspect and maintain the system, and instruction on how activities in the home can impact the system.

Homeowners wanting a more in depth focus on aerobic systems may attend a 6 hour class scheduled for November 11<sup>th</sup> from 8:30 a.m. until 3:30 p.m. at the NBU Service Center at 355 FM 306 in New Braunfels. The 6 hour

course covers the same material as the 2 hour course, but goes into more depth on aerobic systems and their operation and maintenance. It has **not yet** been determined if attendees will receive certification to maintain their systems, but that notice will be sent out as soon as it can be confirmed.

The 2-hour class is free, but an RSVP is requested in order to adequately provide materials and classroom space. The 6-hr class will likely have a nominal cost to cover course materials, and an RSVP is required, as well. As soon as the course cost is determined, the information will be made available.

To register for either class, contact Ward Ling (wling@ag.tamu.edu or 979-845-6980).

### **Next Partnership Meeting**

The Geronimo and Alligator Creeks Watershed Partnership will meet Tuesday, September 9<sup>th</sup> at 6:00 p.m. at the GBRA River Annex, 905 Nolan Street, Seguin.

Ward Ling will open the meeting with a recap of past and upcoming workshops. Immediately following will be a Rainwater Harvesting Class provided by Dave Elder of the Guadalupe County Master Naturalists. The class will introduce the basics of rainwater harvesting and explore how to build your own system. Highlights will include an in-class demonstration of how to construct your own rain barrel, and a rain barrel will be raffled off at the end of the class as a door prize!

Come find out how you can get involved. We hope to see you there! For more information contact Ward Ling at 979-845-6980 or wling@ag.tamu.edu